

CLAIMS

We Claim:

1. An optical integrated circuit package, comprising:
 - an integrated circuit having a first surface and a second surface, the first surface having a first set of light emitting or sensing devices and a plurality of bond pads;
 - a conductive bump formed on each of the respective bond pads; and
 - a clear molding material that encapsulates the integrated circuit and a portion of each conductive bump such that each conductive bump is partially exposed through the clear molding material, whereby light can pass through the clear molding material and reach the first set of light emitting or sensing devices.
2. An optical integrated circuit package as recited in claim 1, further comprising:
 - a metal pad that is attached to the second surface of the integrated circuit wherein the metal pad is partially encapsulated by the clear molding material.
3. An optical integrated circuit package as recited in claim 2, wherein the metal pad has locking ledges extending from the peripheral edges of the metal pad, whereby the locking ledges serve to lock the metal pad within the clear molding material.
4. An optical integrated circuit package, comprising:
 - an integrated circuit having a first surface and a second surface, the first surface having a first and second set of light emitting or sensing devices and a plurality of bond pads;
 - a conductive bump formed on each of the respective bond pads; and
 - a clear molding material that encapsulates the integrated circuit and a portion of each conductive bump such that each conductive bump is partially exposed through the clear molding material, whereby light can pass through the clear molding material and reach the first set of light emitting or sensing devices.
5. An optical integrated circuit package as recited in claim 4, further comprising:
 - a metal pad that is attached to the second surface of the integrated circuit wherein the metal pad is partially encapsulated by the clear molding material.

6. An optical integrated circuit package as recited in claim 5, wherein the metal pad has locking ledges extending from the peripheral edges of the metal pad, whereby the locking ledges serve to lock the metal pad within the clear molding material.